

Rocky Flats Environmental Technology Site

RECONNAISSANCE LEVEL CHARACTERIZATION

RADIOLOGICAL CHARACTERIZATION PLAN

B559 CLUSTER CLOSURE PROJECT (B562, B563, and B564)

REVISION 0

October 22, 2001

Prepared by:		Date:
	Jeff Ambrose, Radiological Engineer	
Reviewed by:	·	Date:
· · · · · · · · · · · · · · · · · · ·	Duane Parsons, Facility Characterization Coordinator	
Reviewed by:		Date:
	Paul Miles, Quality Assurance	
Approved by:		Date:
Approved by	Bob Richardella, Closure Project Facility Manager	Date



ADMIN RECORD

Radiological Characterization Plan 8559 Cluster (B562, B563, and B564)

Notes and Assumptions:

- This characterization Plan was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols (07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01).
- PDSP Data Quality Objectives were used to develop this characterization plan.

Instructions:

- 1. Verify characterization activities are on the Plan-of-the-Day (POD).
- Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual.
- 3. Verify personnel have appropriate training for the applicable tasks they will be performing.
- 4. Comply with RWP requirements, if applicable.
- 5. Comply with JHA and facility PPE requirements, as applicable.
- 6. Inform the Facility Manager, or designee prior to starting characterization activities.
- 7. Follow applicable characterization and sampling procedures.
- 8. Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs.
- 9. Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal.
- 10. Collect and maintain all characterization paperwork in the Project File(s).
- 11. All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in B559 Cluster Survey Package numbers 562-A-001, 563-A-001, and 564-A-001. Sample locations are denoted on scaled maps attached to each survey package.



	0	0	0	0	0	0 0	Non-Impacted Totals			
no need for this classification.	-					-				
orgination unit. Instance Site Assessment and process knowledge indicate									-	
No Non-Impacted Areas identified in this characterization unit Historical Site	Ϋ́	ĕ Z	ĕ Z	∀ Z	₹ Ž	Ψ Z	¥/N	<u> </u>		
The state of the s	100		Wash and				William Control of the Control of th	VIV	A/N	A/N
TSA Smears Media Class Justification	Media	Smears	TSA	Scan m2	Floor m²	Total m²	Description	Class	Survey Unit	Survey. Area
									Von-Impacted Areas	Non-Impac
			on Plan	terizati 3563, ar	harac 1562, E	diological Characterization Plan 9 Cluster (B562, B563, and B564)	Radio B559 C	174		
			aold as	torizati	Para.	Onical	Radio			

ſ		cate	T
		No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate	
		No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge	
	ation	identifi init. His process	dasaiic
	ustiffic	1 Areas ization the solution th	200
İ	Media Class Justif	No Class 1 Areas identified in characterization unit. Historic Assessment and process kno	
\vdash	<u>a</u>		0
		N/A	
	TSA Smears	N/A	0
L	5		0
L	15/	N/A	
	Scan m ²	N/A	0
-	5.	⋖	0
L	윤토	N V	
	Total m²	N/A	
┝			Totals
			₹-
	uoma		Class
	escrit	Ϋ́	
	0		
	lass	A/N	
_	ō		
	urvey Unit	N/A	
Areas	S		
	rea	A/A	
Class	S	_	

	TSA Smears Media Class Justification N/A N/A N/A NO Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification.	
	Media	0
	Smears	0
	N/A	0
	Scan M/A	0
	Ficor m ² N/A	0
	Total	0
	Description N/A	Class 2 Totals
	N/A	
as	Survey	
Class 2 Areas	Survey Area N/A	

	ia E Class Justification	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on interior and exterior surfaces will be biased towards areas of greatest potential for contamination. Scan percentages are justified due to the historical process knowledge of the facility and exterior characterization results of surrounding facilities. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP and will not be used in any statistical analysis (i.e. MARSSIM Sign Test)	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on exterior surfaces will be biased towards areas of greatest potential for contamination. Scan percentages are justified due to the historical process knowledge of the facility and exterior characterization results of surrounding facilities. Due to the inaccessibility of the interior surfaces of B563, 15 additional biased TSA and Smear measurements will be obtained during the demolition phase using the Waste Release Evaluation process.
- ₹	Media	0	0
tion Pla and B56	Smears	15-biased	15-random
diological Characterization Plan 9 Cluster (B562, B563, and B564)	TSA	15-random 15-biased 2-QC	15-random 2-QC
al Char er (B562	Scan m²	8 - Interior 7 - Exterior	17
iologic Cluste	Floor m ²	35	08
Rad B559	Total m²	290 153 - Interior 137 - Exterior	330
	S Pescription	Interior & Exterior of B562	B563
122	SE 3	m	ю -
āS	Surey Unit	5 62- A -00 1	263-A-001
Class 3 Areas	Survey Area	∢	∢

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways; HVAC intakes and exhaust ducts; storage areas; areas of frequent personnel contact such as doors and door frames; and horizontal surfaces.

S
Jo
8
Page

15.

	Glass Justification	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _W . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _W . A 5% scan on interior surfaces and exterior surfaces will be biased towards areas of greatest potential for contamination. Scan percentages are justified due to the historical process knowledge of the facility and exterior characterization results of surrounding facilities. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP and will not be used in any statistical analysis (i.e., MARSSIM Sign	rest).	
u F	Media	0	6	0
tion Pla	Smears	15-biased	90	90
Radiological Characterization Plan B559 Cluster (B562, B563, and B564)	TSA	15-biased 2-QC	96	90
al Char r (B562	Scan	45 - Interior 23 - Exterior	62	62
liologic Cluste	Floor	259	371	371
Rac B559	Total m²	1460 896 - Interior 564 - Exterior	2080	2080
	Description	Interior & Exterior of B564	Class 3 Totals	All Class Totals
Class 3 Areas	Unit		All Clase Areas	Constant of the constant of th

* Biased measurement locations include high traffic areas such as building entrances, exits, and hallways; HVAC intakes and exhaust ducts; storage areas; areas of frequent personnel contact such as doors and door frames; and horizontal surfaces.